UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/830,222	04/23/2004	Richard A. Russell	017750-802	7748

21839 7590 06/08/2009

BUCHANAN, INGERSOLL & ROONEY PC
POST OFFICE BOX 1404
ALEXANDRIA, VA 22313-1404

EXAMINER	
RAO, ANAND SHASHIKANT	

ART UNIT	PAPER NUMBER
2621	

NOTIFICATION DATE	DELIVERY MODE
06/08/2009	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ADIPFDD@bipc.com

Office Action Summary	Application No.	Applicant(s)	
	10/830,222	RUSSELL ET AL.	
	Examiner	Art Unit	
	Andy S. Rao	2621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *20 February 2009*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-44* is/are pending in the application.

4a) Of the above claim(s) *4,5,9-11,13,14,17,18 and 27-43* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-3,6-8,12,15,16,19-26 and 44* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. Applicant's arguments filed with respect to claims 1-3, 6-8, 12, 15-16, 19-20, 23-26 and 44 (amended) as filed on 2/20/09 have been fully considered but they are not persuasive.

2. Claims 1-3, 6-8, 12, 15-16, and 19-20, 23-26 (amended) remain rejected under 35 U.S.C. 102(b) as being anticipated by Lofgren et al., (hereinafter referred to as "Lofgren").

3. Claims 21-22 (amended) remain rejected under 35 U.S.C. 103(a) as being unpatentable over Lofgren et al, (hereinafter referred to as "Lofgren") in view of Josypenko.

4. After summarizing the current stage of prosecution (Amendment of 2/20/09: page 11, lines 4-17), summarizing the salient features of claims 1 and 20 (Amendment of 2/20/09: page 11, lines 18-25; page 12, lines 1-8), providing Applicant's interpretation of the applied primary Lofgren reference (Amendment of 2/20/09: page 12, lines 9-24), the Applicant's argue that Lofgren fails to disclose a method or system including the features of "…receiving a stream of video frames for a first platform and receiving geo-location data from a second platform, and inserting the geo-location data into a video frame to generate a modified video frame…" as in the claims. The Examiner respectfully disagrees. The Examiner notes that Lofgren discloses an aerial platform for generating images that are then transmitted to a ground station, and also discloses a multi-platform configuration (Lofgren: column 3, lines 65-67; column 4, lines 1-5). But, here Lofgren primarily discloses the generation of geo-location data at the ground station (Lofgren: column 4, lines 5-10 and 40-50). Furthermore, the Examiner notes that Lofgren discloses embodiments include further migrating the "embedding" feature (i.e. the generation of geo-location) to aerial platforms (Lofgren: column 11, lines 60-65). Therefore, the Examiner

notes that in a multi-aerial platform configuration having one aerial platform with the embedding feature, an additional platform generating images, and the relaying the images to ground station from one platform and the geo-location data from the second platform such that the insertion occurs at the user terminal meets the scope of the amended claims (Lofgren: column 11, lines 65-67). Accordingly, the Examiner maintains that Lofgren as disclosed still anticipates the features of the amended claims.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.,* 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). In particular, the Examiner notes that the "…receiving a stream of video frames for a first platform and receiving geo-location data from a second platform, and inserting the geo-location data into a video frame to generate a modified video frame…" limitation would be met by Lofgren, and thus the secondary Josypenko reference doesn't also have to address the same feature as well, but meets this feature with its combination with Lofgren.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-3, 6-8, 12, 15-16, 19-20, 23-26, 44 are rejected under 35 U.S.C. 102(b) as being anticipated by Lofgren et al., (hereinafter referred to as "Lofgren").

Lofgren discloses a method for processing and outputting video frames (Lofgren: figures 5-6) comprising: receiving a stream of video frames from a first platform (Lofgren: column 3, lines 65-67); receiving geo-location data from a second platform (Lofgren: column 4, lines 1-5; column 11, lines 60-65); inserting the geo-location data into a video frame to generate a modified video frame (Lofgren: column 4, lines 40-50); and outputting the modified video frame (Lofgren: column 10, lines 50-60), as in the claim.

Regarding claim, Lofgren discloses wherein the geo-location data inserted into a particular video frame is based on the geo-location data of a scene in the particular video frame (Lofgren: column 3, lines 55-64; column 4, lines 10-15), as in the claim.

Regarding claim 3, Lofgren discloses wherein a time tag is also inserted into the video frame (Lofgren: column 4, lines 40-45: “file history”), as in the claim.

Regarding claim 6, Lofgren discloses storing the stream of video frames along with the associated geo-location data (Lofgren: column 4, lines 50-55), as in the claim.

Regarding claim 7, Lofgren discloses searching the stored geo-location data to identify geo-location data satisfying criteria specified in at least one search command (Lofgren: column 5, lines 5-15); and transmitting the identified geo-location data and video frames corresponding to the identified geo-location data (Lofgren: column 4, lines 1-6), as in the claim.

Regarding claim 8, Lofgren discloses wherein the time tags associated with the video frames are stored along with the geo-location data (Lofgren: column 4, lines 40-50), as in the claim.

Regarding claim 12, Lofgren discloses generating an index using the geo-location data and the time tags (Lofgren: column 4, lines 47-52); and searching the index based on the geo-location data or the time tags, wherein the outputted modified video frames are those video frames which are associated with the searched for geo-location data or the time tags (Lofgren: column 5, lines 25-40), as in the claim.

Regarding claim 15, Lofgren discloses wherein the geo-location data is inserted into a visible portion of the video frame (Lofgren: column 5, lines 5-15), as in the claim.

Regarding claim 16, Lofgren discloses wherein the geo-location data is inserted into a non-visible portion of the video frame (Lofgren: column 7, lines 30-40), as in the claim.

Regarding claim 19, Lofgren discloses wherein the modified video frame is output onto a computer generated terrain map of a region of interest such that the modified video frame (Lofgren: column 3, lines 55-62), and any targets of interest are located within a proper geo-location within the displayed terrain map (Lofgren: column 1, lines 30-67; column 2, lines 1-53).

Lofgren discloses a system (Lofgren: figure 1) comprising: a receiver which receives from a first platform (Lofgren: column 3, lines 65-67) and receives geo-location data from a second platform (Lofgren: column 4, lines 1-4; column 11, lines 60-65); a stream of video frames (Lofgren: figure 1, element 11: antenna inherently a part of the 'aerial platfom'); a processor which inserts the geo-location data into a video frame to generate a modified video frame (Lofgren: column 4, lines 40-50); and an output for outputting the modified video frame (Lofgren: column 10, lines 50-60), as in claim 20.

Regarding claim 23, Lofgren discloses a transmitter connected to the output for transmitting the modified video frame (Lofgren: column 4, lines 30-40), as in the claim.

Regarding claims 24-25, Lofgren discloses a memory for storing the video frames along with associated geo-location data (Lofgren: column 4, lines 30-35), wherein the processor indexes the geo-location data, searches the geo-location data based on a search input, and the output modified video frame is a video frame corresponding to the search input (Lofgren: column 4, lines 30-50), as in the claim.

Regarding claim 26, Lofgren discloses wherein the memory also stores time tags and sensor data associated with each of the video frames (Lofgren: column 4, lines 40-45: "file history"), and wherein the processor indexes the geo-location data, searches the geo-location data, the time tags and/or the sensor data based on a search input, and the output modified video frame is a video frame corresponding to the search input (Lofgren: column 5, lines 5-25), as in the claim.

Regarding claim 44, Lofgren discloses determining the geo-location data using at least positioning information of the second platform and a distance between a scene in a particular video frame and the second platform (Lofgren: column 4, lines 40-50), as in the claim.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. Claims 21-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lofgren et al, (hereinafter referred to as "Lofgren") in view of Josypenko.

Lofgren discloses a system (Lofgren: figure 1) comprising: a receiver which receives from a first platform (Lofgren: column 3, lines 65-67) and receives geo-location data from a second platform (Lofgren: column 4, lines 1-4; column 11, lines 60-65); a stream of video frames (Lofgren: figure 1, element 11: antenna inherently a part of the 'aerial platfom'); a processor which inserts the geo-location data into a video frame to generate a modified video frame (Lofgren: column 4, lines 40-50); and an output for outputting the modified video frame (Lofgren: column 10, lines 50-60), as in claims 21-22. However, Lofgren fails to particularly disclose wherein the antenna is a linear taper antenna that is arranged to receive and transmit radar signals. Josypenko discloses a tapered direct fed quadrifilar helix antenna that incorporates the use of a linear taper (Josypenko: column 5, lines 45-55) and further discloses the use of the antenna for receiving and transmitting radar signals (Josypenko: column 5, lines 10-25) in order to have a compact antenna with good cardioid characteristics with circular polarization (Josypenko: column 3, lines 60-67) in communications between fixed ground stations and mobile stations (Josypenko: column 1, lines 25-37). Accordingly, given this teaching, it would have been obvious for one of ordinary skill in the art at the time of the invention to incorporate the Josypenko antenna linear taper antenna into the Lofgren system as its transmission/reception means for its aerial platform in order to gain the benefits of having an antenna with desired cardioid characteristics with circular polarization to allow for communications between the mobile station of the aerial platform and the ground stations of the Lofgren system. The Lofgren system, now incorporating the Josypenko linear taper antenna, has all of the features of claims 21-22.

Conclusion

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andy S. Rao whose telephone number is (571)-272-7337. The examiner can normally be reached on Monday-Friday 8 hours.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mehrdad Dastouri can be reached on (571)-272-7418. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Andy S. Rao
Primary Examiner
Art Unit 2621

asr
/Andy S. Rao/
Primary Examiner, Art Unit 2621
June 3, 2009